



Washington State Ferries Financing Study

Washington State Transportation Commission

Dec. 12, 2006

Cedar River Group



Legislative Direction

- Conduct a finance study of the Washington State ferry system (consultant team, working with Legislative staff)
- Purpose: Facilitate policy discussions and decisions by the Legislature regarding Washington State Ferries

2006 Washington State Legislature SSB 6241:

The legislature recognizes there is a need within the Washington State Ferries for predictable cash flows, transparency, assessment of organizational structure, verification that the system is operating at maximum efficiency, and better labor relations.

Study: Review and evaluate the ferry system's financial plan, including current assumptions and past studies on:

- *Operating program* – including ridership, revenue & cost forecasts, and the accuracy of those forecasts
- *Capital program* – including project scoping, prioritization and cost estimating, project changes (including legislative input regarding significant changes), and performance measures.

Ferry System Overview

10 routes – 7 travel sheds

Central Puget Sound – Bainbridge, Edmonds, Bremerton

Pt. Defiance – Tahlequah

South Sound – Triangle– Southworth, Vashon, Fauntleroy

Pt. Townsend - Keystone

Clinton - Mukilteo

San Juan Islands - Anacortes-Friday Harbor, Orcas, Shaw, Lopez

Sidney International route

20 terminals/28 vessels

Ridership – 2005

23.8 million

Peak ridership – 1999 at 26.5 million/10% reduction since 1999

Ridership down on all routes and in all travel sheds

Farebox Recovery

2001 Joint Task Force – goal 80% farebox recovery

76% systemwide- routes: 111% (Bainbridge) to 23% (Vashon POF) (05)

Ferry Finances – Overview

Draft Long-Range Plan 2006-2030

First plan to reflect loss of MVET funding

Capital expenditures

Projected at \$5.6 billion

Under-funded by \$410.7 million even with:

\$ 925.5 million transferred from operations

\$2,567.0 million discretionary motor vehicle fund

\$ 974.9 dedicated tax support (including Nickel, TPA)

Operating Budget

Expenses anticipated to be less than revenues from farebox, ancillary sources & dedicated tax support

Surplus - \$925.5 million – transferred to capital

Farebox recovery – 98.6% over the 25-year period
– 78% (05-07) to 109% (29-31)

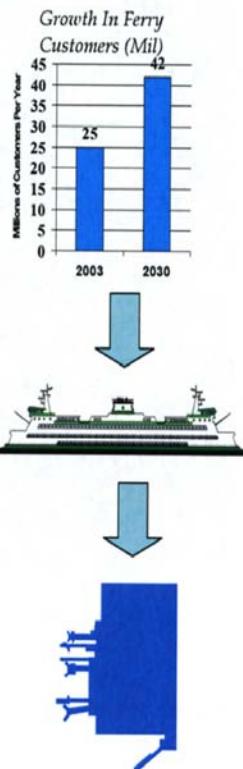
Study Outline

Demand
Level of service standard
Traffic demand management
Vessel planning
Terminal and repair facilities
Operating budget
Capital budget

Key Concepts for Improving Ferry Service

Operations drives capital investment

- Demand for ferry service drives the fleet size and deployment.
- Fleet size and deployment drives shore-side infrastructure.



Demand-Ridership Projection

Two travel models

Travel Demand Model

Used for

- Long-range system, corridor & route planning
- Identifying future service & capital needs
- Guiding terminal design

Provides

- Ridership projections for 25 year period
- Estimates of ridership by route, method of boarding, peak use
- Estimates under different service scenarios

Econometric Model

Used for

- Revenue estimates for Transportation Revenue Forecast Council
- Fare policy scenarios for the WSTC

Provides

- Current biennium & 16 year projections of ridership & revenue
- Fiscal year revenue & ridership forecasts by route, month & fare
- Revenue & ridership impacts of alternative services & fares
- Fare elasticities of demand by six fare categories

Accuracy

Econometric model proven to be very accurate
Travel demand model – WSF does not track actuals against estimate

Different results

Travel demand model – 25% higher ridership projection by 2023
43% higher for passengers, 4% for vehicles

Travel demand model – 56% total growth/Econometric 24%

Draft Long-Range Plan with service additions - 88% growth by 2030

Draft Long-Range Plan baseline – 68% growth by 2030

Why Updates

Econometric model – updated quarterly

Travel demand model – based on PSRC model updated less often

Auto Operating Costs

Travel demand model – remain constant

Econometric model – varies with gasoline prices & fuel efficiency

Peak Period

Travel demand model – projects from 4 hour PM peak

Tacoma Narrows Bridge: TDM Overstates Cross Sound Traffic

Underlying PSRC model – understates Tacoma Narrows Bridge use
66,000 TNB daily in 2020 vs. 120,000 WSDOT estimate
11% estimated reduction in TDM model projection if corrected

Relationship to Historical Ridership

WSF states travel demand model forecast mimics previous WSF gains
Cautions:

1970-80 periods highest ever increase in 2 worker households
Tariffs lagged behind inflation during this period
Current 2.5% fare increase assumption is greater than inflation

Recreation users

Neither model provides good information

Origin & Destination Study

Last done in 1999 – before rate increases
Being updated 2006

Vehicle drivers

Need refined market information

Demand - Recommendations

1. Use both models to get information needed (or)
2. Replace with new model
3. Reconcile differences if use both
4. Use econometric model for capital planning and terminal design
5. Develop market information on recreational users and vehicle users

Level of Service Standards

Adopted by the Transportation Commission in 1994

walk-ons – no boat wait

vehicles – 1 boat wait except Bainbridge & Mukilteo – 2 boat wait
San Juans - % of daily capacity – seasonally adjusted

Planning is based on the peak of the peak level of traffic – when projections indicate level of service will be exceeded add capacity

Under the projections from the travel demand model – WSF can meet passenger demand through 2030 (exception Bainbridge)

Assumes non-WSF passenger-only ferry service Kingston & Vashon

Vehicle demand – driving capacity increases

Capacity ample in non-peak periods for vehicles and passengers

Recommendation

 Review level of service standards

Is boat waits the correct standard?

If so should they be relaxed for vehicles?

Traffic Demand Management

Key – manage peak vehicle demand

WSF has not thoroughly reviewed traffic demand strategies or operational changes to reduce peak vehicle demand

Options range from pricing strategies to reservation systems

Analysis being requested by others – particularly cities reviewing environmental impact statements (example Seattle)

1998 Audit – recommended clean slate or operational analysis

Recommendations

1. Cost-benefit analysis of operational changes
2. WSTC review of pricing strategies – value pricing, congestion pricing
3. Recognize travel shed and route differences in evaluation

Operating Budget

Review based on legislative staff work/consultant recommendations

Finances

High rate of earned income

77% 2005-07 biennium

76% farebox

1% ancillary concessions and other revenue

Transfers to capital account from operating account

Legislative Plan assumes transfers to capital from operating

Grows to 100% of dedicated taxes & portion of earned revenues

Minimum fund balance (\$5 million) in the operating account

Consultant Observations

- Operating reserves are low for volatile operation/high earned income
- Intent of dedicated operating revenues is affected if 100% transferred to capital
- Should be clear if farebox or other earned revenue used for capital
- Tying capital revenue to transfers from operating makes the capital funding as volatile as operating revenues & expenses
- State does not project labor costs beyond collective bargaining agreement – understates projected costs

Farebox Revenue

Tariffs increased 62% between 2001-06 with loss of MVET funding

Assumed in legislative plan and Draft Long-Range Plan – 2.5% annually

Tariffs set by WSTC with a Tariff Policy Committee

2006 tariff cycle – looked at value and congestion pricing

TPC uses tariff route equity concept/modified by travel shed

 Tariff route equity based on route lengths

 Set rates on Bainbridge – round to nearest nickel

 Raise all other rates proportionately

 Modify for travel shed considerations

 i.e. Bremerton route

Farebox Revenue

Legislative Direction – WSTC may consider

Subsidy available

Estimated revenues from ancillary source

Time, distance & scheduling of runs

M&O costs of runs adjusted for operating mode

Efficient distribution of cross-Sound traffic

Rates for commuters & ferry-dependent areas

Increase walk-on & vehicular passengers

Promote non-peak use

Pre-purchase of multiple fares

Other factors prudent managers would consider

WSTC in developing tariffs must either

Conduct public hearings or survey users and

Consult with the Ferry Advisory Committees

Consultant Observations

Tariffs play a key role in revenue generation & traffic demand

Legislature has provided very broad guidance

TPC was created before changes in governance role of WSTC

TPC includes elected officials which makes it difficult to separate the legislature from tariff decisions

TPC has conducted public hearings rather than surveying users – either of which is allowed by the legislature

Tariff rate equity

Makes it difficult to recognize travel shed/route differences

Affects farebox recovery – example Bremerton route 51% recovery

Traffic Demand Management

TPC reviewed some policy changes in 2006 tariff cycle

Made no changes in light of tariff rate equity policy

Non-peak ridership – WSF has ample capacity in non-peak periods and a fixed cost of operation. A key to increased net revenue is increasing non-peak ridership.

Consultant Observations

Farebox recovery by route will vary and this should be recognized and accepted

Concessions and other income is small proportion of WSF earned revenue

Impact of Cost Changes

Sept. 2006 fuel forecast lowered expected fuel costs

Collective bargaining agreements & settlements increased labor costs

On-going costs of \$25.7 million per biennium

One-time costs - \$8.9 million

Reduces funds available to transfer to capital to \$420.3 million

Consultant Observations

Funds to transfer from operating to capital unlikely to be available, even at reduced level, because increased labor costs are not projected beyond the 2007-09 agreements

Farebox Recovery: November forecasts/New labor costs

Route statements 2005 – 76%

Projected 2005-07

WSF costs – 71%

All Operating Costs – 66%

Total with Capital – 39%

Recommendations

Finance

 Either merge capital & operating account or

Do not transfer from operating to capital

2. Maintain a larger operating reserve to allow for volatility of earned revenue & operating expenses

Farebox Revenue

1. Legislature should consider providing more specific tariff guidance
2. WSTC should examine role of TPC – consider elimination
3. Survey ferry users in setting tariffs
4. Re-examine tariff rate equity policies to allow for traffic demand & value pricing strategies
5. Consider funding programs to increase non-peak ridership
6. Establish ridership & farebox recovery goals by route/shed

Expenses

1. WSF should provide expense projections that include more accurate projected labor costs to use in setting tariffs

WSTC Questions

1) Level of Service

What role, if any, for the WSTC in reviewing the level of service standards?

2) Tariffs

a) Financial Policies

Transfer to capital – should it be considered?

Reserves/fund balance permitted

Expense projection accuracy – particularly labor

Expense projections – new terminals/new service

b) Tariff Structure

Route and travel shed ridership and farebox recovery goals

Market information – recreation users and vehicles

Tariff rate equity structure

Traffic demand management – by route & travel shed

WSTC Questions

c) Tariff Policy Committee – continue?

d) Public Input

Survey of users

Required to continue consultation with FACs

May also want to continue public hearings

e) Legislative Direction

3) Washington State Transportation Plan

Ferry financing study recommendations – affect on future plans